

REMARKS

Favorable reconsideration of this application, in light of the preceding amendments and following discussion, is respectfully requested.

Claims 1-17 are pending in this application. Claims 1 and 16 are amended, and claim 17 is newly added. Claims 1 and 16 are independent.

Applicants acknowledge with appreciation the Examiner's indication that the drawings filed on August 4, 2005 have been accepted by the United States Patent and Trademark Office (USPTO); the references included in the Information Disclosure Statement filed August 4, 2005 have been considered; and that the certified priority documents filed on August 4, 2005 have been received by the USPTO.

Entry of Amendment under 37 C.F.R. § 1.116

Applicants respectfully request the Examiner use his discretion to enter this Amendment under 37 C.F.R. §1.116 on the record. Applicants respectfully submit the amendments are merely clarifying and the primary arguments are similar to those previously submitted and thus, this amendment does not raise new issues requiring further search and/or consideration. Further, Applicants respectfully submit that these arguments overcome the cited references as detailed below and thus, new claim 17 can be allowed without further search and/or consideration at least because new claim 17 depends from claim 1, which is believed to be allowable.

Claim Rejections under 35 U.S.C. § 103

Claims 1-4, 8, 10-13 and 16

Claims 1-4, 8, 10-13 and 16 stand rejected under 35 U.S.C. §103(a) as unpatentable over Hu (U.S. Patent No. 5,377,250) in view of Silver et al. (U.S. Publication No. 2003/0123614, herein Silver). Applicants respectfully traverse this rejection for the reasons detailed below.

Initially, Applicants respectfully submit that pending claims are patentable over the cited references for the reasons previously submitted in the Amendment filed August 22, 2007. However, Applicants provide the arguments below to further distinguish the claims over the cited references and to specifically respond to the Examiner's assertion in the "Response to Arguments" section included in the Office Action dated December 19, 2006.

As indicated in the "Response to Arguments" section of the Office Action, the Examiner is maintaining his position that Hu describes voxels that are reconstructed separately. In particular, the Examiner cites column 11, lines 36-40, which states "In order to obtain a complete projection set, that is, in order to have each voxel 80 illuminated by at least one ray for each detector array ..."

In response to the Examiner's assertion and citation of Hu, Applicants note that Hu discloses a reconstruction that results in individual or separate voxels, but this reconstruction occurs on the whole. In other words, Hu utilizes a closed reconstruction, which results in the absorption of values for a plurality of individual voxels.

Conversely, claim 1 recites "each image voxel being reconstructed separately from projection data." Accordingly, a plurality of closed reconstruction processes are therefore carried out for the reconstruction of volume data composed of a plurality of voxels. Stated differently, according to claim 1, exclusively and precisely those beams, which penetrate a single voxel, are taken into consideration for each individual reconstruction process of the single voxel.

To further clarify this point, claim 1 is amended to also recite that “a measured value filtered for each image voxel is accumulated only on the respective voxel.” This feature further clarifies that each voxel is reconstructed separately and individually in a separate reconstruction process. This does not mean that every voxel is individually present after the reconstruction, but it means that each reconstruction process exclusively relates to the individual voxel. Support for this amendment is provided in the Applicants’ specification in paragraph [0015] of the substitute specification filed August 4, 2005.

As indicated in the previously-filed amendment, Silver fails to cure the deficiencies of Hu as described above with respect to independent claim 1. Therefore, Applicants respectfully request that the rejection of independent claim 1 under 35 U.S.C. §103(a) in view of Hu and Silver be withdrawn.

Further, claims 2-4, 8 and 10-13 depend from claim 1 and thus, are allowable over Hu and Silver to at least the same reasons as claim 1. Still further, claim 16 includes features somewhat similar to claim 1 and thus, is also believed to be in condition for allowance. Therefore, Applicants request that the rejection to claims 2-4, 8, 10-13 and 16 also be withdrawn.

Claim 7

Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Hu and Silver and in further view of Noo et al. (IEEE Vol. 7, no. 6, June 1998, herein Noo).

Applicants respectfully submit that Noo fails to cure the deficiencies of Hu and Silver as described above with respect to independent claim 1 and thus, respectfully submit that dependent claim 7 is allowable over Hu, Silver and Gullberg for at least the same reasons that independent claim 1 is allowable over Hu and Silver. Therefore, Applicants respectfully request that the rejection of claim 7 be withdrawn.

Claim 9

Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Hu and Silver and in further view of Gullberg et al. (IEEE Vol. 11, no. 1, June 1992, herein Gullberg).

Applicants respectfully submit that Gullberg fails to cure the deficiencies of Hu and Silver as described above with respect to independent claim 1 and thus, respectfully submit that dependent claim 9 is allowable over Hu, Silver and Gullberg for at least the same reasons that independent claim 1 is allowable over Hu and Silver. Therefore, Applicants respectfully request that the rejection of claim 9 under 35 U.S.C. §103(a) in view of Hu, Silver and Gullberg be withdrawn.

Claims 5 and 6

Claims 5 and 6 stand rejected under U.S.C. §103(a) as unpatentable over Hu, Silver and Lai (U.S. Patent No. 6,118,841).

Applicants respectfully submit that Lai fails to cure the deficiencies of Hu and Silver as described above with respect to independent claim 1 and thus, respectfully submit that dependent claims 5 and 6 are allowable over Hu, Silver and Lai for at least the same reasons that independent claim 1 is allowable over Hu and Silver. Therefore, Applicants respectfully request that the rejection of claims 5 and 6 under 35 U.S.C. §103(a) be withdrawn.

Claims 14 and 15

Claims 14 and 15 stand rejected under 35 U.S.C. §103(a) over Hu, Silver and Lai.

Applicants respectfully submit that Lai fails to cure the deficiencies of Hu and Silver as described above with respect to independent claim 1 and thus, respectfully submit that dependent claims 14-15 are allowable over Hu, Silver and Lai for at least the same reasons that independent claim 1 is allowable over Hu and Silver. Therefore, Applicants respectfully request that the rejection of claims 14 and 15 be withdrawn.

New Claim

Applicants respectfully submit that new claim 17 is allowable for the same reasons as independent claim 1 as well as the additional features recited in claim 17.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of each of pending claims of the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required \$120 extension fee herewith.

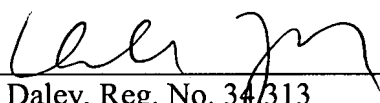
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By


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